Neaft would it be to med book ??! ARCHAEOLOGICAL INVESTIGATION OF THE EAST AND WEST BARRACKS AT FORT FREDERICK STATE PARK, WASHINGTON COUNTY, MARYLAND -WA-20may a uprecessor here. Tright be contració to some generalie. les mont on p. 1 (WAZO is the post, not the PREPARED BY Stephen Israel, M.A. facrocke or the park which are the only features

specified in tette.)

Sportored This project was conducted under contract from the Maryland Bicentennial Commission division of the

Maryland Department of Economic put on one line and Community Development

(Under contract dated 29 May 1974)

Vanuary 1975

Under the audices of the Maryland Bicentennial Commission and in joint effort with several state agencies, the State of Maryland is preparing plans for the restoration of Fort

Frederick. Archaeological investigation was first designed to assist architectural and historical research to investigate on document and evaluate the east and west colonial barrack ruins, the subject of the proposed rebuilding.

Excavation showed that the east barrack reflected authentic 18th Century fort construction. The barrack foundation is both intact and consistent in elevation and width. Also, all the fireplace footings are H-shaped.

The difference between the designs of the east and west barrack foundations is attributed to the 1930's Civilian Conservation Corps (CCC) modification of the west barrack's fireplaces and foundations. At that time all the fireplaces and foundation walls were altered by capping to a new standard grade.

The excavations revealed a natural sloping terrain laid beneath the present day landscaped cosmetic grade. The new grade was placed in the 1930's by the CCC archaeological and restoration projects. Evidence was also found of the 18th Century occupation lenses (strata) and surface grade elevations.

No new information was uncovered from archival, architectural or archaeological research, to date, regarding the building materials, height or appearance. A 1778 letter describing

### ABSTRACT Cont...

the Fort buildings in need of repair does not specify the barracks' construction materials or design.

Recommendations were made for preserving the stone foundations and regrading the west barrack. From 50 to 75 percent of the 1756 stone foundation can be preserved in the barracks' reconstruction. Secondly, a partial restoration of the 18th Century sloping grade can be accomplished by lowering the south portion of the west barrack's present grade. Hopefully, these recommendations, if performed, can contribute toward a more authentic restoration of Fort Frederick.

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#### INTRODUCTION

Under the aupices of the Maryland Bicentennial
Commission, and in joint effort with the Maryland Department
of Natural Resources, Maryland Park-Service and Maryland
Geological Survey, the State of Maryland has been preparing
plans for the reconstruction of the colonial, east and west
barracks at Fort Frederick. Architectural research was
carried out by Emil Kish, historical research by Ross Kimmel
and a program for archaeological research by Tyler Bastian.
In the spring of 1974, an archaeological contract was awarded
to the author to investigate, document and evaluate the east
and west barrack sites for architectural information needed
for interpretation of the colonial barracks.

The contract, developed between Mr. Tyler Bastian, state archaeologist and the investigator, involved excavating and evaluating trenches over a period of 4 weeks. However, the trenches in the west barrack area contained deeper backfill than was at first suspected. As a result, the cleaning of the trenches' walls and floors for features required more time than had been anticipated. Additional field work was recommended, to clarify further the nature of the barrack foundations and of the Civilian Conservation Corps (CCC) restoration work.

The Maryland Geological Survey agreed to fund the excavations for two weeks beyond the original four week contract with the Maryland Bicentennial Commission.

preside what who we general objectives of the additional field work were to document the barracks more fully. This field work encompassed (1) excavation of the brick and stone features on the parade ground side of both barracks, (2) expose the corners of the 1756 foundations of the west barrack, (3) expand the explorations for porch supports and other ancillary features which may have been adjacent to the barracks and (4) extend one 5-foot wide trench from the west barrack to the west curtain wall.

### EXCAVATION PROCEDURES

Preliminary preparation for the field work was handled by Tyler Bastian. A short term excavation was anticipated. since the construction of the east and west barracks was expected to begin within a few weeks. This condition necessitated the investigator's immediate attention to the field excavation, permitting only a cursory review of the research manuscripts, and photographs.

The principal manuscripts reviewed were Ross M. Kimmel (1973), Tyler J. Bastian (1970 and 1971), George Schindel (1934), Charles Porter (1936), Washington Reed (1934) and CCC archaeological and reconstruction photographs. Schindel's. Porter's and Reed's reports and maps are brief commentaries on the CCC's archaeological and restoration projects. A letter, of Samuel Hughes, a carpenter employed by the provincial government in repair work, dated January 15, 1778. sheds some light on the barrack's appearance (Hughes 1778).

Samuel Hughes letter tells us that both barracks were 120 feet in length and 17 feet in width with eight fireplaces and four stacks in each story. The letter goes on to describe the barracks as... "want 32 winders & 24 doors plank'd up... and the upper story a little better closed to the roof."

The joists which project six feet over the walls on one side are likely a referece to a pitched porch roof on the parade ground side of each barrack.

In the 1930's the CCC objective was the uncovering of the building foundations and their eventual restoration 1936: 4). However, the CCC's method of removing the top soil and stripping a few inches of the sub soil failed to yield pertinent architectural and archaeological evidence. Unsuccessful in locating the original plans of Fort Frederick, the CCC decided to raise the Fort landscape to a new attractive grade. They also capped the 1756 stone foundations with cut stone, in order to display the Fort ruins on the new grade (Schindel, 1934: 3; Porter 1936: 4 and The Daily Mail, July 16, 1934). Furthermeore, we learned that the CCC trenched both barrack areas with a series of criss-crossing trenches, 1-foot wide, 2-feet deep and 8-feet apart (Schindel 1934: 2). Artifacts were saved, but inadequate records and storage arrangements allowed these colonial implements to become lost.

In July 1971, Tyler Bastian dug a single 30 x 5 foot trench across the width of the east barrack (Fig. 1). The test trench disclosed a shallow, disturbed backfill, 9 to 12

inches deep to the exterior of the barrack. Below the top soil, on the parade ground side, a thin brown loam soil lens (stratum) contained a heavy concentration of brick specks and stone rubble. Abutting the exterior foundation walls were trenches  $1\frac{1}{2}$ -feet deep and 1-foot wide. The interior backfill consisted of two clay types. These clay types are a mottled yellow, orange and brown gravelly clay and a red gravelly clay 9 to 15-inches deep.

Review of the above Fort Frederick manuscripts, maps and on the site examinations, raised a number of questions, which the present field investigation attempted to explore. How did the CCC excavation and landscaping projects effect the 1756 foundations and former 18th Century occupation lenses (strata)? What ancillary architectural features and structures remain, such as, the porch supports (Schindel 1934: 3)? Why are the two similar and contemporaneous barrack foundations different? Why are two similar topographic surveys of Fort Frederick contradictory? These questions were raised in order to focus attention on what areas this excavation could add to the general understanding of the barracks.

The excavation began June 24 and continued through August 4th. Three trenches: A, B and C were opened in the first week, across the width of the west barrack (Fig. 2). Each trench extended 30-feet in length and 5-feet in width, but later were enlarged.

Shovels were used to dig Trenches A, B, C, D, E, F, G and H. The disturbed soils were removed as rapidly as possible.

Mechanical equipment (a Case 350 backhoe with a 36-inch wide bucket) was employed to remove the disturbed lenses in Backhoe Trenches A (1 through 12) and B (1 through 11).

Thereafter, the trench floors and walls were carefully checked for interpretive stratigraphy, barrack architecture and evidence of building materials. Mortar, soil and brick samples were taken and bagged, anticipating their usefulness in future studies. All the artifacts and field notes were deposited with the Maryland Geological Survey with the exception of a 6 pd. iron cannon ball left with Superintendent Specher at Fort Frederick State Park.

In the second week, two transverse trenches were mechanically dug through the north-south axes of north barracks:

Backhoe Trench B extending 145-feet through the east barrack and Backhoe Trench A extending 141-feet through the west barrack (Figs. 1 & 2, a-a, a'-a', and d-d). In addition, five more trenches in the west barrack area were opened on the parade ground side (Backhoe Trenches A (8 through 12) and four more in the east barrack (Backhoe Trenches B( 8 through 11). Time did not permit the cleaning of Backhoe Trenches A-8, A-10, B-8, B-9, B-10 or B-11). In the field, Backhoe Trenches A & B were identified as Graded Strips A & B.

The remaining five weeks were spent in enlarging, cleaning, mapping, drawing, photographing and evaluating the trenches and ancillary architectural features. The backhoe trenches extended down to the undisturbed beige-tan sandy clay; 10 to 12 inches in the east barrack and 30 to 36 inches in the west barrack and 56-inches in Trenches A-6 and H

(Figs. 3 & 4).

The writer returned to Fort Frederick during the weekend of October 19th and 20th, to excavate two fireplace footings in the west barrack (Figs. 2, 3 and 4). In addition, a thick cover of moss was found growing on the lower lenses of the opened trenches. This moss is believed to reflect the high organic content of former occupation lenses(strata). The moss was absent in the upper gravelly clay backfill.

# STRATIGRAPHY EAST BARRACK

Backhoe Trench B (1 through 7) and Trenches E and F revealed shallow backfill soil lenses which characterized the whole north-south length of the barrack (Figs. 1 & 3, a-a, a'-a' and c-c). In the exterior Trenches B (1 and 7) the disturbed soil lenses appeared 6, 9 and 12 inches deep, dropping to 18 to 24 inches where trenches were found abutting the barrack foundations. In Backhoe Trench B-7, the present top soil laid directly on the undisturbed befge-tan clay subsoil. In Backhoe Trench B-1, beneath the top soil, a 6 to 9 inch disturbed mottled yellow, orange and brown gravelly clay and red gravelly clay fill laid sharply upon a thin

black humus lens 12-inches below the present grade (Figs. 3, a-a; Plate Vb). In contrast, this black humus lens blended with the undisturbed beige-tan sandy clay beneath, indicating a prolong exposure, e.g., a former top soil.

were found 15 to 18 inches deep consisting of a mottled yellow, orange and brown gravelly clay and red gravelly clay.

Their sharp base demarcation denotes a rapid backfilling.

Our archaeological trenches abutting the fireplace footings disclosed modern cement sloppily placed over the entire face of the exposed footings. These sloppy cement aprons are the same 15 to 18 inch depth as are the backfill lenses.

Artifact recovery in these disturbed lenses, although scattered, did reflect the 18th Century (Table III).

Several previously excavated trenches were uncovered in the exterior Backhoe Trenches B (1 and 7), Trench E and in Bastian's 1971 trench (Figs. 1, 3 and 4, a-a, a'-a', b-b and c-c; Plate Vb). These 1-foot wide trenches were 10 to 18 inches deep, and filled with a mixed assortment of former top soils, red gravelly clays and brown loam; soils. These trenches were likely dug by the CCC in an attempt to trace the outline of the barrack foundation. CCC photographs (copies on file in the Maryland Geological Survey, negative # 485B and 487A) show comparable CCC exploratory trenches abutting the Officer's barrack. The 1756 builder's trench appears to be either non-existant or obliterated by the 1930's CCC excavation. The only artifacts found in these

narrow trenches were a 1940 U.S. penny, an earthenware sherd, 2-square nails and  $a_h^{9|ars}$  base.

In Trenches E and F. a slightly meandering elongated brick feature was re-exposed having been earlier detected in the 1930's (Reed 1934). This brick feature is 100 feet long, to hick in each you laidend to end and sloped toward each other so that the trans two bricks abreast, and tapers in (V-shaped). Several bricks of the top exhibit early mortar binding. Most, however, are laid of the parties in position without a mortar agent. Washington Reed, Jr., former from V. The two on the site CCC architect, inferred that this east barrack brick feature, and its west barrack counter-part (pp.16 & 17), were brick drains. Built  $5\frac{1}{2}$  to  $6\frac{1}{2}$  feet out from the barrack, "the drains" were located on the edge of porch roof (Hughes 1778): There is a discrepancy between the December 1934 survey reading of 473.15 and the July 1973 survey elevation of 474.3 for this east barrack brick feature. These two different elevations are unresolved, in as much, as these tapered bricks appear to be in their authentic 18th Century position 3-inches below the present grade.

In Backhoe Trench B-4, a 9 x9 inch post hole was found. Below the disturbed backfill the post hole is 11-inches deep and tapers to a 4-inch diameter. The post hole noted in the 1971 test trench was not reopened (Fig. 1; Bastian 1971).

STRATIGRAPHY

WEST BARRACK

Trenches A, B, C and D and Backhoe Trenches A (1 through 12)

revealed a 15 to 30 inch deep backfill (Figs. 2, 3 & 4; Plate IVa). On the parade ground and ourtain wall sides of the barrack, the top soil and underlying yellow, orange and brown gravelly clay and red gravelly clay lenses cover a brown sandy loam and shale lens. The latter soil lens and the 1756 stone foundation denote contemporaneity, for the lens abutts the stone wall and its high organic content typifies an occupation lens. Scattered cultural refuse was recovered in this brown sandy loam and shale lens (Table III). Beneath the above disturbed soil lenses lies an undisturbed beige-tan sandy clay subsoil.

Within the barrack foundations, the CCC stripped the soil 4 to 6 inches lower than on their exterior digging (Figs. 3 & 4). Furthermore, the interior barrack disturbed backfill lenses show the same depth as to the fireplace stone breasts (hearth supports). Yet the bottom of the disturbed backfill is 8 to 10 inches above the H-shaped fireplace footings and barrack foundation bases which appear to be submerged in the undisturbed beige-tan sandy clay subsoil.

Trench A was done 30 x 55 feet across the west barrack and later enlarged (Figs. 2 & 4, e-e). This trench contained \$18 to 25 inch thick yellow, orange and brown gravelly clay and red gravelly clay. backfills.

Also, this clay is generally clean and free of debris. The clay lies sharply upon a brown sandy loam and shale lens 15 to 18 inches in depth on the parade ground side, and 27@inches deep on the curtain wall side.

explore for suspected log the beam posts belonging to an interior earth and timber defense wall, catwalk or latrine trenches. A log retaining wall was suspected to be 16 to 17 feet in from the west curtain wall (Bastian 1970: 4; Kimmel 1973: 17-18). However, no evidence was found delineating these conjectured features of the Fort. Instead, two CCC trenches were found 1 foot wide, 1 feet deep and 7 feet aparts at a depth of 36 to 45 inches (Figs 2 & 4, e-e).

These two trenches are parallel to the curtain wall.

Wether these trenches were dug by the CCC or merely cleared (of log retaining wall posts) was not described in the

Photographs taken of Trench' A 36 inch deep floor, t 36 inch deep floor, t 36 inch mottle brown loam revealed an approximate 24 x 24 inch mottle brown loam lens. The photos show the lens lying above one of the CCC trenches (Fig. 2). This square lens was not detected while in the field.

A third CCC trench extended 20-feet from the west foundation wall to within 3½ feet of the west curtain wall.

As a result, this 20- foot trench did not obliterate a black humus and crushed mortar lens abutting the curtain wall beginning 3½ feet out from the wall. This 8-inch deep lens contained a single post-Civil War period glass bottle base.

Also, the top elevation of this lens matches the base of the capped stone of the adjacent west barrack foundation, possibly

denoting the pre-1930 ground grade

In probing the west curtain wall from the vantage point of the opened Trench A, the wall's base was found to be ginches deeper than the floor of Trench A.

A 1-foot wide, 13-inch deep trench was found abutting the west foundation wall's exterior face. No artifacts were found other than brick and mortar specks. It is suspected that, in the 1930's, the CCC trenched the exterior face of the foundation: On the interior side of the barrack foundation the CCC deposited a thick stone and mortar rubble lens abutting both the 1756 wall and 1935 stone capping (Fig. 4, e-e; Plate IVb).

on the parade ground side the black humus lens blends into the undisturbed beige-tan clay 21 to 24 inches below the present grade, indicating a former top soil's extended exposure. No artifacts were recovered from this thin lens. On the curtain wall side, a brown sandy loam, shale and gravel lens 24 to 30 inches deep contained a scattering of 18th Century refuse suggesting a tentative association:

(Table III).

The thin black humus lens found on the parade ground side is absent on the curtain wall side. Trench A and B exhibit comparable soil strata. There is a general uniformity in Trenches A, B and C with their thin black humus and brown sandy loam and shale lenses on the parade ground side and a

thick brown sandy loam, shale and gravel lens on the curtain wall side.

Trench B was dug 30 x 5 feet across the west barrack and later extended 6 feet to uncover the south face of a rectangular stone foundation, east of the west barrack (Figs. 2 & 4, f-f). A CCC trench runs beneath the stone feature. This trench is below the gravelly clay backfill. Also, no relationships or clues to the rectangular stone foundation's 18th Century origin were found. The foundation seems to have been completely rebuilt in the 1930's with modern cement lying in undisturbed clay sub soil.

Trench C day 33½ x 5 feet contained over 100 square nails and bone refuse 6 feet east of the foundation wall. This concentration of nails and bone refuse, 14 to 17 inches deep in a brown sandy loam, shale and gravel lens, is not fully understood. What the nails occurred singly and in clusters of 2 to 6. No intrusion or dip in the lenses was noted. The CCC may not have disturbed this particular area. On the west curtain wall side a trench within a trench was disclosed abutting the foundation exterior wall (Fig. 4, g-g). The absence of artifact associations complicates its explanation.

Backhoe Trench A-1 dug south of the barrack measures

11 x 3 feet (Figs. 2 & 3, d-d). Beneath the 7 to 9 inch deep
top soil a 20 to 23 inch deep orange, yellow and brown and
a red gravelly clay fills were found. The sharp base

demarcations indicate a rapid filling. See Plate IVa,
Fig. 3, d-d and Table II for conjectured depth of CCC
excavation and subsequent 1930's 25-inch stone capping laid
upon a 17-inch high foundation wall.

A thin 1 to 2 inch black humus lens 36 inch deep contained wine bottle glass, square and wire nails and a brass strip. Its blending base demarcation with the undisturbed beige—tan clay below denotes an extended period of exposure to the weather. Abutting the south foundation is a thicker black humus lens dipping down 9-inches. Its sharp demarcation and undulating nature indicates a rapid deposition.

Backhoe Trench A-2 dug adjacent to the south foundation measures 8 x 3 feet. Beneath a 6-inch top soil, 9 to 18 inch yellow, orange and brown gravelly clay and red gravelly clay fills, 2 stone and mortar rubble lens were found (Figs. 2 & 3, d-d). This rubble lens abutts the 1995 (CC capped south foundation wall. Lying on the undisturbed beigetan clay sub soil is a 1 to 2-inch thick black humus lens. Its sharp demarcation attests a rapid deposition or backfill. A scaffold hole, 2 x 1 inch foundation restoration. (See (Plate Ib) which shows wooden scaffolding in the south end of the west barrack.)

Backhoe Trench A-3 was deg 19½ x 3 feet. Beneath a 6-inch top soil, a 23 to 29 inch yellow, orange and brown gravelly clay, red gravelly clay and stone and mortar rubble lens were found lying upon a 1 to 2 inch black

1-2 jules Tiet. humus lens 1 The latter lens thickened to 6 inches at the north end of the trench. The top soil contained artifacts which were which were found during cleaning of the walls. The dominant refuse was 18th Century, excepting a few wire nails and expended cartridge shells (Table III). The black humus lens at the bottom of the trench exhibited sharp edges and contained iron fragments, brick and mortar specks, square nails, pewter knife handle, brass shoe buckles, queensware, saltglaze, flat glass bottle sherds and kaolin pipe stem fragments suggesting an 18th Century context.

Backhoe Trench A-4 was dug 20 x 3 feet. The soils between the two fireplace footings exhibit disturbed lenses to a 27 cinch depth. The fill stratification is identical to Backhoe Trench A-3 . At the base of the trench, two small pockets of black humus were disclosed. Each was filled with brick and mortar specks. The black humus lens undulates) for it is present on the west face of the trench, but absent on the east face (Fig. 3, d-d). Artifacts from the top soil include a 22 cartridge, wire and square nails. Refuse from the lower 24 to 27 inch black humus lens reflects ing an 18th Century contexts includes bone buttons, bone button shaping waste, earthenware sherds, glass bottle sherds, kaolin pipe stems and iron fragments.

Backhoe Trench A-5 was dug 20 x 3 feet. Beneath the top soil, a 24-to 33-inch thick disturbed yellow, orange and brown gravelly clay and a red gravelly clay and brown clay loam, shale and gravel ####s were found. This trench lacked west barrack interior trench strata. The base of the disturbed fill sharp demarcation denotes a rapid deposition.

Backhoe Trench A-6 dug adjacent to the north foundation wall measures 8½ x 3 feet (Figs. 2, 3, & 4; d-d). Below a 6-inch top soil were found a 18 to 23 inch deep lens of yellow, 6 orange and brown gravelly clay, a red gravelly clay, and a 30-inch deep gravelly brown, shale and sandy lens. All these backfill lenses have sharp base lines. Only a single square nail and bottle glass fragment were retrieved in cleaning the walls of this mechanically dug trench. No artifacts were found in the lower mottled yellow, tan, sandy clay fill. The sharp demarcation of these lenses implies a rapid deposition.

Trench H was dug at right angles to the Backhoe Trench A-6 to expose the east and west dimensions of the 56-inch deep excavated feature. Trench H contained a 6 to 9 inch top soil and a 22-inch thick yellow, orange and brown gravelly clay lens lying sharply upon a 1-foot thick black humus, stone and brick rubble lens with a concentration of 18th Century refuse (Plate Vb; Table III). This refuse and rubble lens overlaid a one-foot thick compact yellow, tan, sandy clay backfill containing scattered refuse.

The excavated feature & x & feet flat floor lies on a compacted brownish pale, yellow and light gray clay in

2 Jid he dig this ?

the west half of Trench H (Liesenbein 1974: 23). The east half of the feature was destroyed in the digging of the initial backhoe trench. The remaining lenses rise upward to a shallow shelf along the east foundation wall (Fig. 4, h-h). The excavated feature extended down below the west foundation wall by 19 inches and 28-inches below the modern cement slab on this wall. The rock rubble in the feature's fill suggests that it is the aftermath of a fallen foundation. One such wall is the adjacent north foundation wall which apparently the CCC completely rebuilt.

measures  $11\frac{1}{2} \times 3$  feet. Beneath the top soil, the disturbed lenses extended 18 to 21 inches below today's grade. A  $1\frac{1}{2}$ —inch thick modern cement slab was uncovered 13 inches below grade. The top of the brown, gravelly lens of shale and loam is uneven and may reflect the CCC stripping. A 1—to 3—inch black humus lens, lies on the undisturbed beige—tan clay lens. Its blending demarcation denotes an extended exposure.

The flat cement slab might have been a mixing platform used by the CCC. Six feet north of the north foundation wall, a shallow 12 x 10 x 3 inch deep pocket of mottled brown clay loam and beige tan clay was uncovered at the bottom of the disturbed lenses. The feature's uneven bottom suggests a plant bed.

Backhoe Trench A-9 was dug in two portions, 11½ x 3 feet

to the north of the brick octagonal raised platform and

10½ x 3 feet to the south (Fig. 2, i-i). The CCC uncovered

a 6 x 6 foot diamond-shaped brick platform (Reed 1934

archaeological plan), and built a 15-inch raised cement and

stone support and capped the support with a brick octagonal
shaped platform. Running in a north-south axis is a 6½-foot

long brick feature, Alts 3-brick widths taper inward and

lies on a 24-inch high cement support.

A series of eight; 2 x 1 inch scaffold holes were uncovered 24 to 27 inches deep-on the undisturbed beige-tan clay subsoil. The scaffold holes were found in alignment with the octagonal brick and elongated brick feature (Fig. 2) and represent the CCC restoration wooden props for raising the 18th Century stone and brick features.

Trench A-9 s west face elevations reveal disturbed lenses dipping 15 to 21 inches on both sides of the octagonal brick platform. The blending of the brick humus soil lenses with the undisturbed beige-tan clay beneath implies that the depressions were there prior to the 1930's, and that the CCC conceivably raised the brick platform without disturbing the adjacent soils. A loose mortar, brick and rock rubble lens in the southern end of the trench contained a clasp iron knife and a 1723 English halfpenny.

Another trench is indicated by a 1 x  $1\frac{1}{2}$  foot deep lens in the west elevation. Its shallow depth below today's top soil implies a post-CCC date (Fig. 4, i-i). Yet the

black humus lens below blends with the undisturbed clay suggesting a former ground grade. Whatever the explanation for this narrow trench, it is difficult to believe that the CCC didn't strip this location.

Trench D was dug to obtain a front elevation of the 6½-foot elongated brick feature. The north wall profile shows the raised brick feature mounted on a 24-inch high mortar support. The upper half of which was poured into a wooden mold and the rough lower half poured into an open trench (Fig. 4, j-j). Six feet to the east is a concentration of crushed brick previously noted in the CCC excavations (Reed 1934). These shallow pockets of crushed brick vary from 9 to 14 inches deep. The disturbed soils in the north wall elevation are 15-inches deep.

Backhoe Trench A-11, was dug 101 x 4 feet in the parade ground side to check for porch supports. Below the top soil and yellow, orange and brown gravelly clay, a 9 to 15 inch thick mottled beige-tan clay and black humus rubble pocket was found 21 to 35 inches deep (Fig. 4, k-k). This lens sharp demarcation implies a rapid deposition. The dip's mottled fill may mark the approximate location of the loose stone cited in the 1934 archaeological plan. Artifacts retrieved from this lens included a saltglaze tea pot lid sherd, a delftware sherd, wine bottle sherds and square hails. A black humus lens in the west half of the south face blends with the mottled soil beneath, complicating interpretation, for the east half while or shows a sharp demarcation.

Backhoe Trench A-12 was dug in the parade ground area and measures 12 x 4 feet (Figs. 2 & 4, m-m). The red gravelly clay backfill demarcation is sharp. Abutting this backfill lens is a 36 x 18 x 30 inch deep stone foundation, whose modern cement testifies its complete rebuilding in the 1930's. It is thought to be a stair support (Kish 1974: #2 drawing of Fort Frederick barracks). A 30 to 36 inch deep lens lying on the undisturbed beige-tan clay sub soil may be comparable to the lower mottled rubble lens noted in Backhoe Trench A-11. This lens contained only a delft plate rimsherd, and begins 6 feet out from the barracks wall. On the floor of the undisturbed beige-tan clay, A 11 x 11 × 9 inefer . diameter and 3 worker does 9 x 3 inch deep post hole was found (Fig. 2); tand is slightly

off-set from the barrack's southeast corner.

A thin black humus lens abutts the east wall of the barracks and blends with the undisturbed beige tan clay The partial excavation of the mottled black humus and tan sandy clay rubble complicated its 18, 19 or 20th Century association. This black humus lens was one of the many lenses covered with the moss (See page 6).

EAST AND WEST BARRACK FOUNDATIONS AND GROUND GRADES

In the 1930's the Civilian Conservation Corps (CCC) uncovered the east and west barrack stone foundations and, as after subsequently modified the west barrack foundation. These barrack foundations were only briefly mentioned by Schindel 1934: 3, Porter 1936: 4-6; The Daily Mail, July 16 and

August 14, 1934 and Reed's archaeological plan. Samuel
Hughes, 1778 letter, describes the barracks as being 1209feet
in length and 179feet in width with 4 stacks and 8 fireplaces
in each story.

| Proof to Measter, the nost apparent

The first (pre-excavation) visible differences between the east and west barrack foundations are in the fireplace footings. The east barrack are H-shaped and measure  $6-6\frac{1}{2} \times 8\frac{1}{2}$  feet in planview. The west barrack fireplaces with their stone breasts (hearth supports) measure  $9\frac{1}{2} \times 8$  feet (Figs. 1 & 2).

Excavation of 2 west barrack fireplace footings showed that the stone breasts were built with modern cement and are 6 to 8 inches higher at the base than the 1756 H-shaped fireplace footings. Also, the stone breasts are not attached to the latter below the CCC 15-inch deep capping.

Further differences in the west barrackCCC modifications include the uneven gradations of the CCC stone capping varying 15 to 27 inches in height, 21, 24 and 30 inches in irregular bulky widths, and the completely rebuilt north foundation wall (Table II; Plates IVa and IVb).

The difference in the two elongated brick features, brains, 6 feet ext from the both barracks is not understood. The east barrack feature is ten feet long today with two rows of inward tapering bricks and appears to be in situ (Plate VIa), whereas, the brick feature adjacent to the west barrack is 6½ feet and consists of three abreast bricks with a gentle inward taper and lying ona 24 inch high modern

suggests that originally, these brick drains, it drains, they were likely supports to a wooden trough.

The CCC also uncovered a diamond-shaped brick feature on the familiar of the west barrack parade ground side (Reed 1934). Without specifying why, the CCC capped it with an octagonal-shaped brick cover. This brick platform lies on a stone and cement support 15-inches high. Whether the former diamond-shaped platform was originally 15-inches below today's octagonal platform could not be determined; nor its purpose established. The CCC stripping and the upper 15-inches of backfill together, have destroyed the original stratigraphy.

Two types of mortar were noted throughout the barracks excavation. A soft, earth, sand and lime matrix was found on the lower foundations and disturbed fill lenses and a modern gray cement was found on the stone capping on the east and west barrack foundations, fireplace footings and ancillary features associated with the capping landscaping and modification activities of the 1930's.

The east barrack foundation is less modified, more intact and in keeping with the authentic 18th Century fort construction. Its four, 6-6½ x 8½ foot fireplace footings are H-shaped. Its foundations are consistent in widths, 18 to 21 inches and vertical below the 1930's stone capping. Thirdly, the foundation elevations are consistent with a 13-inch high?

1756 foundation wall and mortar on all four walls (Table II).

It is uncertain whether the 1935 seven-inch stone capping on the four walls were merely mended with cement or added at this time.

In his December 1934 archaeological plan, Reed briefly illustrates the east barrack as "typical section," including the 7-inch stone capping. Questions are raised regarding the condition in which the CCC found the east and west barrack foundations. Also, was the east barrack found more intact than the west barrack?

An identical construction can be discerned for the west barrack before the CCC modified the foundations. The barracks' contemporaneity is pointed to by (1) the similar dimensions, (2) the 4 H-shaped fireplace footings (measuring 7 x 8 feet in planview) and (3) its 12 to 23-inch varying but vertical foundations walls below the capping. Like the east barrack, the west barrack base elevations slopes upward 1-foot from south to north. Only the north foundation wall of the west barrack deviates from this pattern, being 2-feet above the south foundation wall (Fig. 3, d-d).

In the north end of the west barrack, a 5-foot deep, excavated feature was exposed and excavated. The feature has a 8 x 8-foot flat floor with vertical walls except for the sloping east wall (Trench H, h-h and Backhoe Trench A-6, d-d). The flat floor is 19 inches below the west foundation wall and 28 inches below the modern cement apron. The floor is a compact brownish pale, yellow and light gray clay (Liesenbein 1974; 23).

The feature's lower lenses contained many loose building stones and late 18th Century refuse. A 1780-1810 deposition

date is surmised. Is it plausible that the CCC found no standing north foundation wall because one had collapsed?

Today, the entire wall is faced with modern cement (Fig. 3). Moreover, this CCC wall typifies other capped walls, 21 to 30 inch broad base tapering upward to a 17 to18 inch wide ground grade capping. These CCC stone cappings are in strong contrast with the straight sides observed for the 1756 foundations.

At the south end of the west barrack, the 1756 foundation is 17-inches high and 12-inches wide. The 1930's stone capping, above, is 25-inches high and 24-inches wide at the base, tapering to the uniform 17 to 18 inch top width (Fig. 3). The east and west walls of the west barrack vary from 18 to 24 inches in width with the stone capping frequently bulky and off-set projecting over the 1756 vertical walls.

The excavations found few and scattered post holes to mean the exterior of the barracks (Backhoe Trench A-7, A-12, D and B-4; Figs. 1 & 2). The scaffold holes were created by the CCC 1930's restoration work (Fig. 2). Evidence of building material, such as chinking and iron spikes, was not found. However, following the extensive 1930's trenching and stripping, the absence of such evidence in 1974 can not be a convincing factor in determining the barrack building materials.

Flat glass sherds were minimal, and were concentrated

in Trench H's excavated feature. Square nails were scattered throughout the disturbed excavated lenses, except in Trench C, parade ground side, where some 100 nails were found in a brown sandy loam, shale and gravel lens, 14 to 17-inch depths, in clusters of 2, 3, 4, 5 or 6. Further validity to this 18th Century occupation lens is the artifact clustering of the square nails and bone refuse (Table III).

The present grade (was laid in 1935-1937) surrounding the west barrack. Re-establishment of the 18th Century grade is problematical because of the extensive 1930's trenching and The 1974 trench elevations and CCC photographs stripping. attest to the new 1930's cosmetic grade denoting a 18 to 30 inch backfill. Thus, the west barrack 18th Century grade is conjectured to have been 15-inches lower at the north end, to 30-inches lower at the south end of the barracks (Figs. 3 & 5). In sum, the combined evidence supporting this opinion encompasses the depth of the stone capping and backfill, the sharp demarcations of the backfill lenses denoting rapid deposition, CCC photographs, and the contrasting 1934 and The difference in grade 1973 topographic surveys. This contrast is clearly depicted in the CCC photographs between the early and final CCC alteration activities of the west barrack appearance and new grade (Plates Ia, Ib and II).

Like its foundation, the east barrack's ground grade of the real appears less modified than the west barrack's. The exact

18th Century level and grade are not known, but apparently

approximate today's grade (Fig. 5). This view is supported by the shallowness of (1) the disturbed soils surrounding the east barrack, (Figs. 3 & 4, a-a, a'-a', b-b and c-c), (2) elongated brick feature (Plate VIa) and (3) the cement platform surrounding the well, said to have been built in the 1920's.

Nevertheless, Fox & Associates 1973 survey assigned a 15-inch higher elevation to the overall east barrack grade, in contrast to the 1934 survey. The evidence shown in 1974 does not support this higher grade. Possibly, the CCC trenches and stripping activities destroyed the explanation, but for reasons discussed above, the author senses more validity in the east barrack's unmodified grade. The 1934 and 1973 topographic elevations conceivably have a certain degree of error. Also, the 1934 elevations possibly are less following the CCC alterations. Only in the southeast and southwest corners of the west barrack do the 1934 and 1973 survey elevations match (Table II). The 1934 elevations are (470.6 and 471.2) and the 1973 are (473.3). The 25-inch difference is in the stone capping height. In the remaining northeast and northwest corners of the west barrack and the east barrack, there are differences of more than one foot. The height of, the CCC capping does not agree with these differences. (The east barrack north and south foundations are as confusing. These east barrack top elevations are recorded in 1934 as (473.0 and 473.7) and the 1973 elevations

are 474.5 and 475.0) respectfully.

Further uncertainties are in the height of the two northernmost west barrack fireplaces. The 1934 top elevations are (479.1 and 474.2) and the 1973 are (473.6).

The 479.1 elevation given for the northern fireplace footing is assumed to be an error (Reed 1934). The two southern fireplace footings 1934 top elevations 4473.1 and 473.5% — 1934 and the 1973 elevations 4473.4 and 473.5% match.

east barrack in Backhoe Trench B-1, pridence of occupation lenses, have been destroyed. In the area of the west barrack, occupational-like lenses were found to the east and west sides of the barrack. These latter lenses of brown sandy loam, shale and gravel reveal a scattering of 18th Century refuse (Table III). A thick cover of moss was found growing on this lens two months after the trenches were opened. What is not known is how much of the top of the 18th Century occupation lens did the CCC strip off?

The possibility of an uneven grade along the longitudinal axis of the west barrack is suggested in photographs taken during the CCC excavations (copies on file in the Maryland Geological Survey, negative # 482, 484A, 484B, 485A and Plate Ia). The above photographs suggest that the west barrack fireplaces may have protruded slightly above the pre-1930's ground grade. Excavation of two west barrack fireplace footings (Fig. 2) showed this to be true. The two exposed

fireplaces show the original 1756 footings 1-foot higher than the barrack walls beneath the cosmetic stone capping.

The base elevations of the foundations are our most consistent, intact and reliable elevations to work with for indetermining the 18th Century foundation and ground grades.

While the east barrack 1756 stone foundation remains intact with a 13-inch deep foundation, the west barrack 1756 foundation graduates 7 to 23 inches hight Inspite of the fluctuating the paracks reveal that both foundations slope upward one-foot at the base south to north (Tables 1 & 2).

Today's east and west barrack ground grade obtained from Fox & Associates, Inc. survey, July 1973

			W	Barrack	E	Barrack
N.	Fndn	Wall-		474.0		475.0
S.	Fndn	Wall-		473.2		474.4

Elevations of intact bases of 1756 Foundations obtained August 1974

		성기 있다고 이 교원이 함께 있었	W Barrack	E Barrack
N.	Fndn	Wall-	471.11 (?)	473.25
S.	Fndn	Wall-	469.9	472.9

Conjectured 18th Century Ground Grade obtained August 1974

		W Barrack	E	Barrack
N.	Fndn Wall-	473.3		475.0
S.	Fndn Wall-	471.6		474.5

A substantial sloping terrain is suggested in studying the uneven CCC backfill, stone capping, CCC photographs and the 1974 archaeological trench elevations. The south foundation base of the west barrack is 3 feet lower than

the south foundation base of the east barrack; (469.9 : 472.9)(Table I). Similarily, the north foundation base of the west barrack is 2-feet lower than the east barrack north foundation base; (471.11: 473.25). Another contemporary French and Indian War frontier fort, Fort Ligonier, located 80 miles to the northwest of Fort Frederick was also built on a slope in hilly terrain (Grimm 1970: 7).

RESULTS HE CONCLUSIONS RECOMMENDATIONS

Results The project's general objective was to assist that help assure to assist in the interpretation of the east and west barracks. The June-July 1974 excavation uncovered the 1756 barrack foundations, fireplace footings and 4 ancillary foundations. Barrack and ground grade elevations were defined along with remnants of the 18th Century occupation lens.

No new information was uncovered from archival, architectural or archaeological collaborated research to date, regarding the building materials (stone, hewn log or planked) appearance, height or how roofed. A 1778 letter, describing the fort buildings in need of repair, does not specify the barrack's construction materials or designs.

A more complete understanding of the Civilian Conservation
Corp's (CCC) 1930's excavation and restoration activities was
achieved. The CCC was principally interested in locating
building foundations. Unable to locate original plans of the

Fort and its interior buildings, the CCC decided to stabilize, landscape and cap the barrack foundations, in order to display the buildings' exact locations, encourage tourist imagination, and create an attractive fort and state park (The Daily Mail, July 16 and August 14, 1934).

The stone foundations for porch supports, reported by Schindel (1934: 3), were not found. Sherds of flat glass were found. The use of this flat glass can be attributed to either window glass, snuff, gin or frest Dutch bottles.

The CCC apparently did not recognize the disturbed lenses (strata in the north end of the west barrack. The 1974 investigation excavated and x 8 x 5 foot deep 18th Century excavated feature or storage area. Its 1780 to 1810 conjectured fill date is based on its 18th Century refuse fill content (Figs. 2 & 4, h-h, Table III).

Conclusions The east barrack seems more in keeping with authentic 18th Century fort construction. This barrack is less modified and more intact than the west barrack. Moreover, the east barrack fireplace footings are all H-shaped and the foundation widths and elevations are vertical and consistent (page 21-23).

The differences between the east and west barracks are attributed to the CCC restoration and modification activities. In capping the west barrack foundations and fireplace footings, the CCC made modifications in the foundation, appearance of the These changes resulted in bulky and off-set stone capping,

revised fireplace shape and dimensions, a rebuilt north foundation wall, and a new ground grade. The stone breasts (hearth supports) on the north and south face of the west barrack fireplaces were added in the 1930's. Beneath the fireplace capping, the stone breasts are faced with modern cement, and are slightly higher at the base than are the original H-shaped fireplace footings and adjacent foundation wall. Similar foundation modifications are observed in the stone stair support, rectangular stone platform, elongated brick feature and the diamond-shaped platform.

The (backfill soil lenses in the area of the west barrack are 15 to 30 inches deep, comparable to the 15 to 27 inch stone capping height. The deepest fill and capping appears at the south end of the west barrack. The backfill is made up of a clean, little disturbed, mottled yellow, orange. and brown gravelly clay and a red gravelly clay. Shallow remnants of the 18th Century occupation lens remain, in the parade ground and curtain wall sides of the west barrack. In addition to the scattered 18th Century refuse, a thick cover of moss was found growing on these conjectured 18th Century refuse lenses two months after the trenches were opened. The most The thin black humus lens lying on the beige-tan undisturbed clay is found only on the parade ground side of the west barrack. The same black humus found in the north and south west barrack trenches but is less defined. It is absent an the curtain wall side in the archaeological trenches.

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The sole trench south of the west barrack, Backhoe

Trench A-1, exposed a thick black humus lens lying on the

beige-tan undisturbed clay subsoil. Its cultural association
is uncertain. Possibly this black humus lens was disturbed
in the 1930's?

It is the author's opinion that the CCC's excavation and restoration activities were followed by a rapid deposition of backfill lenses in which the black humus lenses were covered quickly by gravelly clay, fill.

between the east and west barrack foundations in size, design and alignment, than was previously portrayed. The mach of the

Recommendations In the forthcoming reconstruction of the east and west barracks, it is my viewpoint that the new barrack buildings should retain as much of the 1756 foundation as is feasible. Thus, I recommend that 50 to 75 percent of the 1756 barrack foundations be preserved. If for budgetary reasons these preserved foundations cannot be prepared for display at the present time, they can be covered and exposed for display at a later date.

A partial restoration of the 18th Century natural sloping grade is suggested. In lowering the south end of the west barrack by 20-inches the effect would create the natural and original terrain setting of the Barracks (Fig. 5) (Rob Bushnell and Emil Kish, personal communication). I

do not advise removing all 30-inches of the 1930's cosmetic backfill. Instead, it would be wise to leave a 6-inch cushion at the base of the CCC backfill. This would insure future archaeological investigations, of maximum recovery, by

avoid further destruction of the archaeological evidence. It is also advisable to restrict the regrading to the immediate area of the west barrack. Along with regrading, a drainage system should be installed in the southwest portion of the Fort.

Even though the artifacts came primary from disturbed lenses, they are predominantly of the 18th Century, reflecting the cultural history of the Fort (Table III). I urge their preservation, annotation and secure storage, in anticipation of future study and display.

For compiling a more complete Colonial fort history and subsequent events, I urge continued research to uncover more general historical documentation.

In order to define further the stone and brick ancillary features in the parade ground side of the west barrack,

I recommend that their modern capping be lifted mechanically to expose their 18th century characteristics, if any .........................

Excavating their side elevations failed to provide stratarelationships or clues. The CCC modifications possibly destroyed the evidence of these 18th Century features. Fort Belvoir's Army Engineer Library repository should be consulted for

possible clues to the identity of Fort Frederick's brick and stone features adjacent to both barracks.

Additional archaeological investigations are urged for the purpose of locating architectural features between the barracks and curtain walls. Especially after Trench A. Thich failed to uncover such features as log retaining walls, cat walk post holes or latrine trenches (Fig. 2).

elevation of The

Still unresolved are the west barrack fireplace footing Exevations south to north, 473.1, 473.6, 473.3 and 479.1 feet noted in Reed's 1934 archaeological plan. Excavation showed that the 1756 fireplace footings are one-foot higher than the adjacent barrack foundations. Several CCC pretoken before the borroofs was cayed capping photographs also suggest these fireplace elevations (copies on file in the Maryland Geological Survey, negative # 482, 484A and 484B). Another photograph (xerox copy just received) is in George Schindel's 1934 report; page 2 top photograph, which caption reads, "subgrading and construction of the east barrack." Modern prints of these 1934-1937 black and white negatives possibly would give a clearer historical documentation, on the CCC modifications and new clues to the architecture, fireplace and barrack elevations. However, these CCC negatives have yet to be found.

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